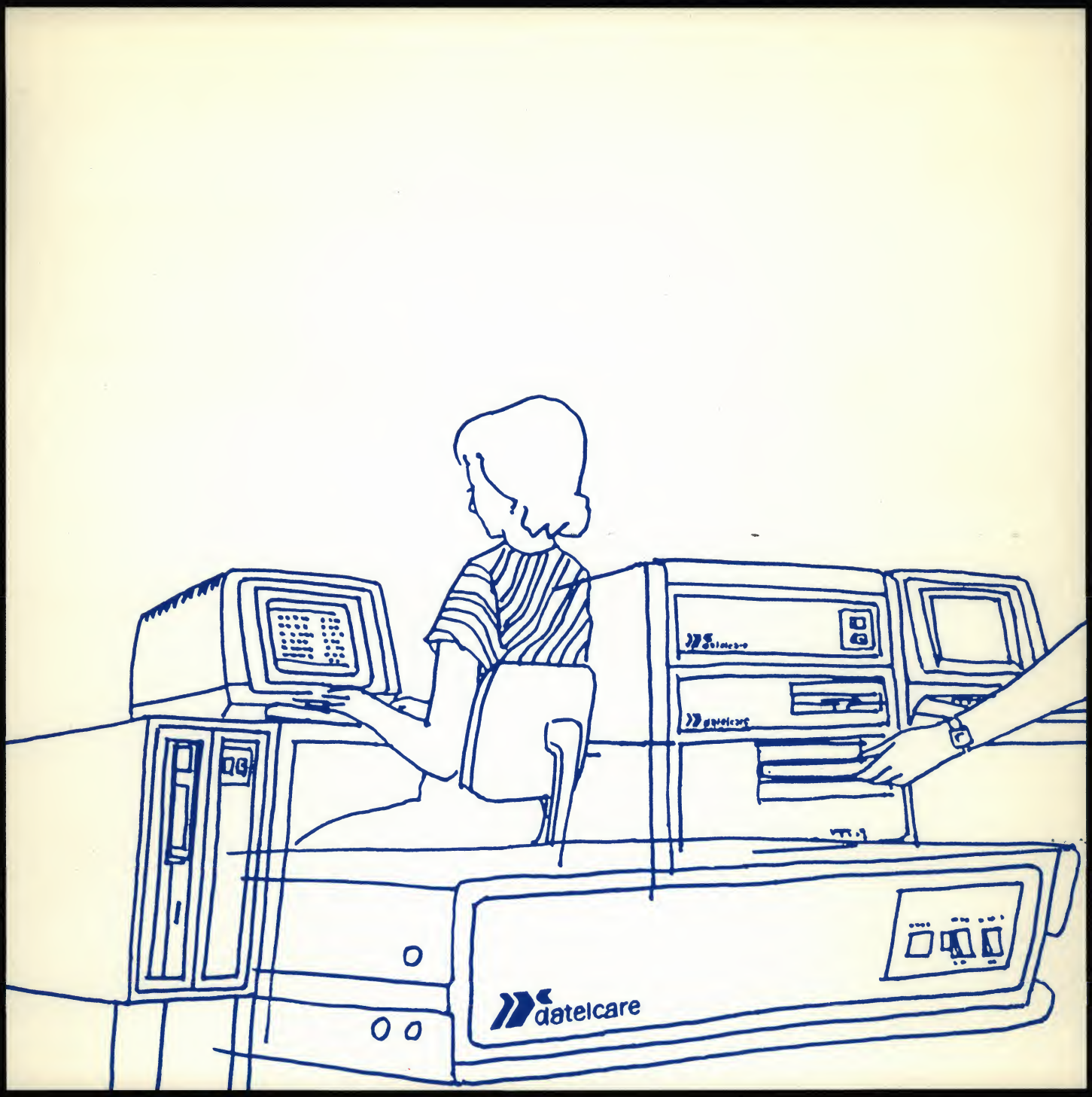

datelcare

COMPUTERSYSTEMEN

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DDDDDDD       TTTTTTTTTT     CCCCCC
DD     DD         TT        CC
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DD      DD        TT       CC                ========
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  22222        33333           //    77777777    33333
 22     22     33   33         //    77    77    33   33
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      22           33        //           77          33
    22            3333      //           77          3333
  22                33     //           77             33
 22                 33    //           77             33
 22222222     333333    //           77          333333
```

Hardware configurations DTC-23xx
and DTC-73xx systems.


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  \\ \XXXX\  (XX(
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 // /XXXX/
// /XXXX/
```

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IMPORTANT NOTICE

This document was prepared with great care. However, Datelcare cannot be held responsible for any errors that may still appear. The information in this document may change without notice and should not be construed as a commitment by Datelcare.

REVISION HISTORY

Rev 01.01	10-jun-83	First edition
Rev 01.03	17-aug-83	Changes to comply with current status
Rev 02.01	24-aug-83	First public release
Rev 03.01	08-may-84	New configurations included

1. The philosophy behind our systems :

Datelcare has developed a range of computer systems based on a strong philosophy. Not just another computer but a series of powerful and compatible general purpose computer systems. Specifically designed to combine state-of-the-art technology with high performance and moderate pricing.

Datelcare systems provide flexible solutions to the ever changing requirements of your work. These systems are able to 'grow' along with the demand put upon them. Many people have found that they outgrow their systems much sooner than expected and had to 'throw-away' these systems. Under such circumstances Datelcare would have given them the possibility of enhancing either disk capacity and/or processor performance in order to cope with the steady growth of their regular workload. To ensure a low cost of ownership, our philosophy includes the use of highly reliable components. This has resulted in low monthly maintenance charges and improved up-times.

Datelcare's philosophy is based on a long experience in the minicomputer and add-on business. Being a major representative for many leading suppliers of peripherals for over 10 years Datelcare, has acquired a wealth of knowledge on this equipment. As a result you will find that this detailed knowledge leads to designs based on up-to-date equipment and geared to what users really need.

1.1. Quality assurance :

One of the features of Datelcare systems is the fact that all our products are built to the highest commercial standards. All systems are fully tested prior to shipment. All printed circuit boards are burnt-in and temperature cycled before being implemented into systems. Datelcare systems are fully software compatible. All standard operating systems will run on these computers without modification. Datelcare feels that this is the only safe way to anticipate future software developments.

2. General purpose computersystems.

The DTC-23xx/73xx computersystems are state-of-the-art general purpose minicomputers. A DTC system will economically justify itself in a scientific, technical or business data processing environment.

All DTC systems are built around a common concept thus enabling later upgrading of each system without making large parts obsolete. Additional main- or auxilliary storage, extra interfaces, terminals or printers and more powerful cpu's can be added with minimal effort. It is possible to start with the smallest system and expand only if and when necessary.

Datelcare's computersystems offer high processing power at an affordable price. Datelcare's systems are extremely flexible and can be used efficiently in a wide variety of applications.

2.1. 16 bit central processing unit.

All models are equipped with a powerful 16 bit cpu. The DTC-23xx systems use an LSI-11/23 processor with a minimum of 256 KB of main memory. It is always possible to field-upgrade a DTC-23xx system to become a DTC-73xx system.

2.2. Upto 4 megabytes of main memory.

All DTC-73xx systems are provided with an LSI-11/73 cpu. These systems include 256 KB or more of primary storage. Additional memory totalling upto 4 MB can be installed. A 20 or 67 MB winchester disk provides the necessary permanent storage capacity. Backup facilities for programs and data are provided by means of IBM-formatted flexible disks, disk-cartridges or 1600 BPI 9 track magnetic tapes.

2.3. Runs unmodified software.

All DTC configurations will run standard operating systems. The winchester disks provide ample storage and allow full program development and system generation to be done on these machines. DTC systems, unlike some machines from other vendors, DO NOT require stripped-down or modified versions of the operating systems.

3. DTC-2302/F Diskette based computer system.

The DTC-2302/F is a small single user computer system with flexible disks as the secondary storage devices. It can be used as a stand-alone development or application machine in a technical or business data processing environment. Its IBM-compatible flexible disks allow data interchange with a wide selection of computer systems of any make. This system can also be operated as a satelite linked to other DTC-systems to provide a distributed data processing system.

Key features of this system are :

- LSI-11/23 16 bit CPU
- 256 KB main memory, includes 2 parity bits per word
- 2 IBM compatible flexible-disk drives,
- 2 MB online storage capacity
- Uses single/double sided, single/double density diskettes
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in 2 5.25 inch high cabinets
- Includes 2 additional asynchronous interface lines that enable connection of extra terminals, printers or modems.
- Can be expanded with, among many other options, a winchester disk and/or tape unit
- Is intended to run the RT-11 operating system

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-KEF11 - Floating point firmware option
DTC-FPF11 - Floating point accelerator
DTC-H2912 - Free standing system enclosure, 29 inch high.
DTC-SDK - Bureau type desk, houses system underneath desk and VDU on top

4. DTC-2320/WF Winchester based system with diskette backup.

The DTC-2320/WF contains a 20.8 MB winchester disk to provide ample storage space for system and user files. This system enhances the facilities of the DTC-2302/F by allowing more demanding tasks or multi-user applications to be run on this very cost-effective system. The DTC-2320/WF provides the small and medium sized company or department with a powerful tool to help manage its affairs. It is also possible to enhance the operations of large centralized dataprocessing centers by offloading peculiar or cumbersome processing from the mainframe and onto the DTC-2320/WF system. The DTC system would provide departmental time-sharing facilities to gather data. Preprocessed information can then be fed into the mainframe by means of diskettes or datatransmission for smooth and problemless batch-processing at any convenient time.

Key features of this system are :

- LSI-11/23 16 bit CPU, 16, 18 and 22 bit addressing capability
- 256 KB main memory, includes 2 parity bits per word
- 20.8 MB fixed media winchester disk
- 1 IBM compatible flexible disk drive
- Uses single/double sided, single/double density diskettes
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in 2 5.25 inch high cabinets
- 2 additional asynchronous interface lines allow connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks and/or tape units
- Is intended to run the TSX-plus operating system
- Will run many other operating systems

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-FPF11 - Floating point accelerator
DTC-KEF11 - Floating point firmware option
DTC-H2912 - Free standing system enclosure, 29 inch high.
DTC-SDK - Bureau type desk, houses system underneath desk and VDU on top

5. DTC-2330/WI Winchester based system with cartridge disk backup.

The DTC-2330/WI is identical to the DTC-2320/WF aside from the backup media used. Instead of the 8 inch flexible disk, this system contains a special cartridge-disk that allows a full 10.4 MB of storage in addition to the 20.8 MB winchester disk. The cartridge-disk can be used to augment the on-line storage space and for a convenient back-up of the winchester.

Key features of this system are :

- LSI-11/23 16 bit CPU, 16, 18 and 22 bit addressing capability
- 256 KB main memory, includes 2 parity bits per word
- 20.8 MB fixed media winchester disk
- 10.4 MB cartridge disk for backup and additional storage
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in 2 5.25 inch high cabinets
- 2 additional asynchronous interface lines allow connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks and/or tape units
- Is intended to run the TSX-plus or RSTS/E operating system
- Will run many other operating systems

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-FPF11 - Floating point accelerator
DTC-KEF11 - Floating point firmware option
DTC-H2912 - Free standing system enclosure, 29 inch high.
DTC-SDK - Bureau type desk, houses system underneath desk and VDU on top

6. DTC-2367/WS Large configuration system.

This system provides the user with nearly unlimited possibillities to store data and run sophisticated programs. It allows many users to share a common highspeed fixed-media disk drive. Main-memory capacities of up to 4 MB enable tasks to be performed that traditionally required much larger computer systems. All DTC-2367/WS system come with an ANSI standard tape drive allowing unlimited information storage and interchange with other (mainframe) computer systems. A choice of operating and utility software is available for this system.

Key features of this system are :

- LSI-11/23 16 bit CPU, 16, 18 and 22 bit addressing capability
- 512 KB main memory, includes 2 parity bits per word
- 67 MB fixed media high performance winchester disk
- 1600 BPI 9 track ANSI/IBM compatible streaming tape drive
- Operates at 25 ips in start/stop or 100 ips in streaming mode
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in a 29 inch free standing cabinet
- Includes 2 additional asynchronous interface lines that enable connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks, multiplexors and/or tape units.
- Is intended to run the RSTS/E or TSX-plus operating system
- Will run many other operating systems.

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-FPF11 - Floating point accelerator
DTC-KEF11 - Floating point firmware option
DTC-134MB - Disk capacity of 134 MB instead of 67 MB
DTC-3200B - 3200 BPI option for tape drive
DTC-CHTAP - CacheTape allows faster start/stop operation of the tape drive

7. DTC-7320/WF Winchester based system with diskette backup.

The DTC-7320/WF is similar to the DTC-2320/WF apart from the Central Processing Unit. In this system an LSI-11/73 cpu is used for those applications where a very powerful processor is required. The internal 32 bits data path, the floating point instruction set and the integral 8 KB cache memory all add to the high computational speed that this system accomplishes.

Key features of this system are :

- LSI-11/73 16/32 bit CPU includes 8 KB cache memory
- Includes FP-11 floating point instruction set
- 256 KB main memory, includes 2 parity bits per word
- 20.8 MB fixed media winchester disk
- 1 IBM compatible flexible disk drive
- Uses single/double sided, single/double density diskettes
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in 2 5.25 inch high cabinets
- 2 additional asynchronous interface lines allow connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks and/or tape units
- Is intended to run the RT-11 or TSX-plus operating system
- Will run many other operating systems

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-H2912 - Free standing system enclosure, 29 inch high.
DTC-SDK - Bureau type desk, houses system underneath desk and VDU on top

8. DTC-7330/WI Winchester based system with cartridge disk backup.

The DTC-7330/WI is similar to the DTC-2330/WI system aside from the CPU used. As in the DTC-7320/WF, this system employs an LSI-11/73 processor. This configuration is ideally suited to technical and scientifical applications where high processor performance is critical.

Key features of this system are :

- LSI-11/73 16/32 bit CPU, includes 8 KB cache memory
- Includes FP-11 floating point instruction set
- 256 KB main memory, includes 2 parity bits per word
- 20.8 MB fixed media winchester disk
- 10.4 MB cartridge disk for backup and additional storage
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in 2 5.25 inch high cabinets
- 2 additional asynchronous interface lines allow connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks and/or tape units
- Is intended to run the TSX-plus or RSTS/E operating system
- Will run many other operating systems

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-H2912 - Free standing system enclosure, 29 inch high.
DTC-SDK - Bureau type desk, houses system underneath desk and VDU on top

9. DTC-7367/WS Large configuration system.

This system provides the ultimate configuration presently possible with Q-bus based architectures. Its LSI-11/73 CPU allows many users to share the common high-speed peripherals of the system. The powerful processor with main-memory capacities ranging up to 4 MB enable tasks to be performed that only recently required very expensive computer systems. The DTC-7367/WS system is equiped with an ANSI standard tape drive allowing unlimited information storage and/or interchange with other computer systems. A wide choice of operating and utility software makes this system a users dream.

Key features of this system are :

- LSI-11/73 16/32 bit CPU, including 8 KB cache memory
- Includes FP-11 floating point instruction set
- 512 KB main memory, includes 2 parity bits per word
- 67 MB fixed media high performance winchester disk
- 1600 BPI 9 track ANSI/IBM compatible streaming tape drive
- Operates at 25 ips in start/stop or 100 ips in streaming mode
- Console terminal interface
- Line Time Clock (60 Hz)
- Bootstrap loader
- Contained in a 29 inch free standing cabinet
- Includes 2 additional asynchronous interface lines that enable connection of extra terminals, printers or modems
- Can be expanded with additional main memory, winchester disks, multiplexors and/or tape units.
- Is intended to run the RSTS/E or TSX-plus operating system
- Will run many other operating systems.

Standard options :

DTC-V102 - Visual Display Terminal (VT-100 compatible)
DTC-V52 - Visual Display Terminal (VT-52 compatible)
DTC-134MB - Disk capacity of 134 MB instead of 67 MB
DTC-3200B - 3200 BPI option for tape drive
DTC-CHTAP - CacheTape allows faster start/stop operation of the tape drive

10. Common features.

All systems are built around a common concept. This enables problemless upgrading to occur when your system needs adaption due to an increase in workload or a change of circumstances. Reliability is a standard feature built in to every system. Extensive testing is performed prior to shipment.

10.1. Enclosure.

All systems consist of at least 2 5.25 inch high cabinets that are rackmountable. The DTC-2367/WS and DTC-7367/WS are inclusive of an attractive free standing 29 inch high cabinet (DTC-H2912). Other cabinets are available. Refer to the 'Hardware options reference guide' for further information.

The following parts are found in every unit :

- 8 slot quad wide backplane, includes integral 22 bit addressing
- A quadruple output power supply, fully overload protected
- 2 double-sided / double-density diskette drives
- or 1 5.25" winchesterdisk combined with 1 diskette drive
- or 1 5.25" winchesterdisk combined with a cartridge disk
- or 1 8" winchesterdisk combined with a streaming tape drive
- Removable frontpanels for easy access to system modules
- Dual function key switch (off/on and boot)
- Processor board (LSI-11/23 or LSI-11/73)
- Memory board(s), 256 or 512 KB
- Multi purpose interface board
- Includes crystal controlled system clock

10.2. Power supply.

The DTC systems are equipped with one switching power supply that provides four regulated output voltages. This power supply can deliver a continues average output power of 250 W. The power supply meets the requirements of BS3861, IEC380 and VDE0804.

Specifications :

Output voltage	Max continuous load
+ 5 V	30 A
+ 12 V	6 A
+ 24 V	6 A
- 12 V	6 A

All outputs are fully short circuit protected. The + 5 V supply features a crowbar overvoltage protection.

10.3. Expandability.

All DTC systems are easily expandable. Options include additional main memory, extra interfaces, tape units, disk drives, printers etc.

Refer to the 'Hardware options reference guide' for additional information on hardware options.

10.4. Installation and service.

All models are easy to install or relocate. The equipment is designed to be used in many different applications. Options include 19 inch rack-mountable units for industrial applications and free standing or desk mountable models for office environments.

DTC systems require only a minimum of preventive maintenance. Winchester disks do not normally require p.m. Flexible disk drives and tape units require only occasional cleaning and alignment checking.

DTC systems do not require special environmental conditions. Operating in dusty rooms may necessitate extra periodical cleaning to prevent excessive dirt builtup between parts of the units.

All-in maintenance contracts can be provided at an agreeable price.

11. Addresses :

Datelcare systems are produced by :

Datelcare bv.
Huis ter Heideweg 28
3705 LZ ZEIST
The Netherlands

Postal address :

Datelcare bv.
P.O. box 2
3700 AA ZEIST
The Netherlands

Phone :

Within the Netherlands : 03404-21344

International : + 31 3404 21344

(+ indicates the international access code which may vary from country to country)

Telex :

The Netherlands : 40116 DACAR

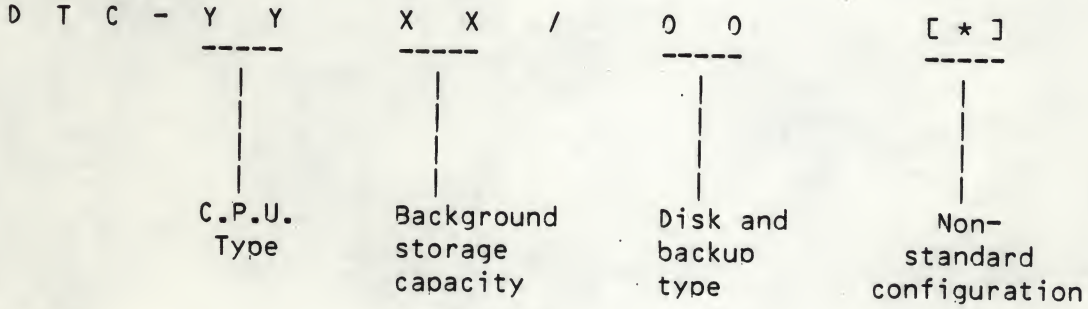
Maintenance and support will be provided by your local distributor. For further information please contact your distributor or Datelcare at the above address.

Address of local distributor :

Appendix A.

Explanation of modelnumbers :

The modelnumbers of DTC systems provide information about the actual configuration of the system. The first two digits identify the type of C.P.U. used in this (sub)system. The next two digits list the nett storage capacity of the disk system used. The suffix identifies the type of disk and the type of backup provided.



C.P.U. type :

Code		Description
YY =	10	Peripheral subsystem
YY =	15	Empty processor box including backplane and power supply
YY =	23	Computer system including LSI 11/23 processor
YY =	73	Computer system including LSI-11/73 processor

Background storage capacity :

Code		Description
XX =	01	One double sided double density flexible disk drive
XX =	02	Two double sided double density flexible disk drives
XX =	20	One 20 MB winchester disk
XX =	30	One 20 MB winchester disk plus 10 MB cartridge disk
XX =	67	One 67 MB winchester disk

Disk and backup type :

Code		Description
00 =	F	(sub)system based exclusively on flexible disks
00 =	WF	(sub)system based on winchester disk with floppy backup
00 =	WI	(sub)system based on winchester disk with cartridge backup
00 =	WS	(sub)system based on winchester disk and streaming tape backup

Non-standard configurations :

The optional asterisks (*) behind the modelnumber indicates that this system is basically a standard system in which however some changes to the normal configuration have been made.
Among these options are a 134 MB winchester disk in stead of the standard 67 MB winchester disk or a 1600/3200 BPI double density tape unit in stead of the 1600 BPI single density tape unit.

Examples :

DTC-1001/F	Subsystem containing a 1 MB flexible disk drive.
DTC-2367/WS	Computer system containing an 11/23 processor, a 67 MB winchester disk plus streaming magtape backup.
DTC-7330/WI	Computer system containing an 11/73 processor, a 20 MB winchester plus a 10 MB cartridge disk.

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